THE DER WEEKLY

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Distributed Energy Resources...the Power of Choice

Industry News

PA Business First to Use 100% Wind

A Philadelphia business became the first for-profit business in Pennsylvania to use 100% wind-generated electricity. The White Dog Café, located on the University of Pennsylvania campus in Philadelphia, and its adjacent gift store, The Black Cat, announced that as of January 1, 2002, they were generating 100% of their electricity by wind power, which was purchased from Community Energy, Inc. in Wayne, Pennsylvania. The café anticipates that they will use 360,000 kilowatt hours of electricity this year. By purchasing wind power, they are reducing their yearly environmental emissions by 432,000 pounds of CO_2, 1,012 pounds of NO_x, and 3,244 pounds of SO_2. The café encourages other business and consumers to take advantage of statewide electricity restructuring and sign on for wind power.
White Dog Café Press Release, March 4
Photo: www.whitedog.com

White Dog Cafe

GE Plastics Investigates New Blades for Wind

Mass Megawatts is working with GE Plastics to investigate the possibility of injection molding plastic blades for Mass Megawatts's Multi-Axis Turbine System (MAT). The MAT turbines currently use metal blades and produce energy forty percent more cheaply than their competitors. With MAT's new design, the turbines can pay for themselves in as little as 18 months because they produce energy at a cost of less than 2.4¢ per kWh.
PR Newswire, March 1

Long Island Homeowners to Install PV

The Long Island Power Authority (LIPA) and New York Governor George Pataki have drawn names of 30 Long Island families who will receive solar-electric systems to generate electricity for their homes under the Solar Pioneer Program. The Governor also announced that LIPA will now offer higher rebates to commercial and residential customers who install solar systems. The Solar Pioneer Program is funded through LIPA's Clean Energy Initiative, a five-year, $170 million program designed to foster the development of clean energy technologies such as fuel cells, solar, wind generation, and geothermal systems.
Long Island Power Authority Press Release, February 27

Trigen to Operate New CHP Installation

Trigen-Boston Energy Corporation has agreed to own, operate, install, and maintain a 6 MW combined heat and power plant at the New England Confectionary Company's (Necco) new site in Revere, Massachusetts. The agreement is for 20 years, and construction is to begin immediately.

"We are pleased to be selected to provide an array of integrated energy services to Necco and look forward to demonstrating how our experience with the food industry and technological know-how will provide economic advantages and environmental benefits to Necco over the life of the contract," said Richard Kessel, President and CEO of Trigen.

The facility is expected to go online in the first quarter of next year, and over the course of the agreement, Necco expects to save over $15 million in energy costs from the two gas engines, heat recovery steam and hot water generation system, selective catalytic reduction system, and oxidation catalyst for emissions control. The plant will have an operating efficiency of 68 percent and reduce CO_2 emissions by 32 percent, NO_x emissions by 39 percent, and SO_2 emissions by over 97 percent.
Trigen Press Release, March 6, 2002

CA ISO Starts DG Aggregation Project

The California Independent System Operator (ISO) announced last month that it has begun an Aggregated Distributed Generation Pilot Project to demonstrate the feasibility of aggregating distributed generation units of less than 1 MW as a means of reducing barriers to entering the ISO markets. The project will allow units that are less than 1 MW in size to be aggregated into units of up to 10 MW, and will demonstrate up to 50 MW total under the program. A workshop is schedule for March 8 to discuss requirements, processes, and contracts with potential participants.
California ISO Announcement, www.caiso.com

GE Introduces Advance Power System

GE Digital Energy, a division of GE Industrial Systems, introduced its Advanced Power System™ (APS) to solve power quality issues between utilities and their critical loads. In the announcement, GE states that the APS is a virtual plug-and-

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*Lydney, a United Kingdom town located in Gloucestershire, has received a government grant to power more than 3,000 homes with electricity powered by renewable resources.**

FERC Study Backs RTOs

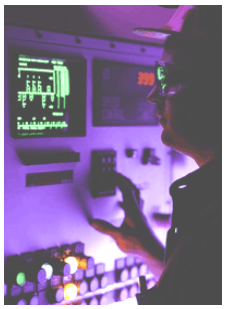
A report commissioned by the Federal Energy Regulatory Commission (FERC) concluded that reorganizing the nation's power grid into regional transmission organizations would improve the efficiency of the wholesale electricity market. According to the consultant's report, "once policy changes are fully in place the results suggest that $1-10 billion per year in economic gains could result. These estimated benefits do not take into account secondary economic impacts or employment gains."

FERC is a strong supporter of the RTO system, and the new report may bolster state support for the program, which had been weak due to states' reluctance to relinquish control over their transmission lines.

The report does offer a caveat, however: "A key finding is that the net benefits of RTO policy will depend on the effective and timely implementation of competitive electric power markets, and on minimizing delays and excessive startup costs."

The full report can be found on FERC's web site at www.ferc.gov/Electric/RTO/Mrkt-Strct-comments/rm01-12-comments.htm

Source: UPI, Feb. 27



Advanced Power System™

play device that combines power generation, conditioning, energy storage, and ancillary electrical distribution equipment. It is designed for applications that isolate the critical load from instantaneous power disturbances, as it continually monitors the incoming power source for a fault condition and ensures uninterrupted power. A 1500 kW APS, consisting of two outdoor weather protected modules, will be installed this month at a GE Industrial Systems data center in Fort Wayne, Indiana.

Business Wire, March 6; Photo, www.geindustrial.com

CA Solar Units Generate More than Expected

AstroPower, Inc. announced that two of its California solar installations generated 10 percent more power in 2001 than originally expected, with a combined output of 320,000 kW. One solar plant is located at a non-profit retail and teaching facility, Real Goods Solar Living Center, in Hopland. The other unit is located in Berkeley on the roof of a working factory.

PR Newswire, March 4;
Photo: www.solarliving.org

Solar Living Center

DOE News

Research Leader Appointed to NAS Panel

Dr. Robert Thomas of Cornell University was recently appointed a member of the National Academy of Sciences, Committee on Science and Technology for Countering Terrorism: Panel on Systems Analysis and Systems Engineering. This panel is aimed at "helping the Executive Office of the President use the nation's and the world's scientific and technical community in a timely response to the threat of catastrophic terrorism." The panel's report is due to the President's Science Advisor on April 1, 2002. Dr. Thomas is the Director of the Power Systems Engineering Research Center, a National Science Foundation Center of eleven universities that is part of a consortium that supports the OPT/DER Transmission Reliability Research program.

By The Numbers

7.8	kilowatts of solar panel generation capacity that will be installed on Oregon's Capitol building next month
200	number of Oregon households that have received tax credits for photovoltaic installations since 1978
500	estimated number of photovoltaic systems installed in Oregon, according to the Oregon Office of Energy

Source: Associated Press, March 7

*Severn-Wye, a non-profit organization, is managing the project and may install solar panels, wind turbines, and hydropower units in different areas of the town.**

Calendar of Events

MARCH 2002			
11-13	6th Annual Distributed Generation & On-Site Power Conference	Atlanta, GA	www.dist-gen.com; (508) 427-9470; gesi@mediaone.net
12	National Energy Modeling System/ Annual Energy Outlook Conference	Washington, DC	www.eia.doe.gov/oiaf/aeo/conf/
12-14	DOE Gas Turbine and Microturbine Programs Peer Review	Fairfax, VA	www.eren.doe.gov/der/microturbines/news_events.html
13-15	Power System 2002 Conference: Impact of Distributed Generation	Clemson, SC	www.ces.clemson.edu/powsys2002/main.htm
14-15	Fundamentals of Energy Management	Las Vegas, NV	www.aeecenter.org/seminars
17-21	EPRI's 7th Distributed Resources Conference and Expo	Dallas, TX	www.epri.com/programHigh.asp?program=238295&objid=266151
19-21	The Hart World Fuels Conference	San Antonio, TX	www.chemweek.com
19-21	Electric Power 2002	St. Louis, MO	www.electricpowerexpo.com
20-23	Building Energy Conference	Medford, MA	www.nesea.org; (877) 44-SOLAR, ext. 20
22	Indiana/Caterpillar CHP Workshop	Indianapolis, IN	Ethan Rogers, (317) 232-8961
25-26	Fundamentals of Cogeneration & On-site Generation	Philadelphia, PA	www.aeecenter.org/seminars
26-27	2nd Annual Fuel Cell Investor	New York, NY	www.srinstitute.com/part_iter_site_page.cfm?iteration_id=337
27-28	GLOBALCON Energy/Facilities Management Conference & Expo	Philadelphia, PA	www.aeecenter.org/seminars

APRIL 2002			
2-3	Implementing Renewable Energy Projects	Washington, DC	Gail Norby, (303) 526-5528, gail@imaginittech.com
3-4	The 2002 Hydrogen Investment Forum	Washington, DC	www.intertechusa.com
8	Micropower "Get Connected" Workshop	Toronto, Ontario	www.micropower-connect.org
8-9	Colorado Wind and Distributed Energy: Renewables for Rural Prosperity	Denver, CO	www.state.co.us/oemc
8-9	Fuel Cells and Distributed Power Conference	Stamford, CT	www.bccresearch.com/fuel_cells
15-17	EESAT 2002, Electric Energy Storage—Applications and Technologies	San Francisco, CA	www.sandia.gov/EESAT; Dr. Imre Gyuk (202) 586-1482
23-24	Reciprocating Engine Peer Review	Chicago, IL	Brian Marchionini 202-406-4109
30-May2	Thermally Activated Technologies Peer Review	Nashville, TN	Jan Brinch 410-290-0370

*The project is one of fifteen that are being implemented throughout the country.**

Calendar of Events

APRIL 2002			
16-17	Second DOE/UN International Conference and Workshop on Hybrid Power Systems	Charlotte, NC	www.netl.doe.gov click on "events"
21-23	4th Annual Small Fuel Cells Conference	Washington, DC	custserv@knowledgefoundation.com
30-May2	Houston Energy Expo	Houston, TX	www.nesanet.org
MAY 2002			
1-3	External Combustion Engines—New Strategies for Efficient, Green Power Generation	Los Angeles, CA	chuck@intertechusa.com
2	Green Power: Turn it On! Getting to 10% Conference	Harrisburg, PA	Maryanne Daniel; 215-656-6964
12-15	The 8th National Clean Cities Conference and Expo	Oklahoma City, OK	www.ccities.doe.gov/conference.shtml
14-16	E-Vision 2002: Shaping Our Future by Reducing Energy Intensity in the U.S. Economy	Arlington, VA	Jeff Dowd; jeff.dowd@ee.doe.gov
20	Congressional Fuel Cell Expo	Washington, DC	www.usfcc.com
23-24	FEMP DER Workshop	Atlanta, GA	Lisa Hollingsworth 404-562-0569
JUNE 2002			
2-5	Energy 2002 Workshop and Expo: Hot Challenges, Cool Solutions	Palm Springs, CA	(703) 243-8343, www.energy2002.ee.doe.gov
6-7	West Coast Energy Management Congress	Anaheim, CA	(703) 243-8343, www.aeecenter.org
16-18	National Accounts Conference and Exhibition (American Gas Association)	Nashville, TN	TheGasChoice.com
25-26	DER FEMP Workshop	Chicago, IL	Marion Rawson 202-479-2748
26-29	Building Energy 2002 and the Mid-Atlantic Sustainability Conference	East Brunswick, NJ	www.nesea.org
AUGUST 2002			
18-23	Summer Study on Energy Efficiency in Buildings	Pacific Grove, CA	www.aceee.org

** Source: The Gloucester Citizen, www.thisisgloucestershire.co.uk*